



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,476	12/21/2005	Ulrike Hees	268082US0PCT	8176
22850 7590 12/27/2006 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NGUYEN, TRI V	
			ART UNIT	PAPER NUMBER
			1751	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/27/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/529,476	Applicant(s) HEES ET AL.	
	Examiner Tri V. Nguyen	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 5 and 7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 and 5-6 of U.S. Patent No. 6,607,565 in view of Mischke et al. (US 5,508,389). Claims 1-2 and 5-6 of the '565 reference are an inkjet printing and a sublimation transfer printing respectively. The '565 reference fails to teach the molecular weight component B. The Mischke et al. reference disclose a condensation product of naphthalenesulfonic acid and formaldehyde with a molecular weight of 350 to 35,000. It would have been obvious to a skilled artisan to optimize the molecular weight of the condensation product to arrive at the desired viscosity prevention absent of unexpected results.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1751

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "customary assistants as component D" in line 10. It is unclear as to the limitations of component D (what is a customary assistant?).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrmann et al. (US 6,607,565) or Siegel et al. (US 6,117,224) in view of Mischke et al. (US 5,508,389).

Herrmann et al. disclose an inkjet process and a sublimation transfer printing on a textile with a composition comprising 0.1 to 30% by weight of an anthraquinone or quinophthalone which are free from ionic groups dye (component A), 0.1 to 20% by weight of a dispersant (component B), 10 to 90% by weight of a mono- or polyhydric alcohol and optionally water (see abstract). Herrmann et al. disclose the product of naphthalenesulfonic acid and formaldehyde condensation as component B (col 4, lines 33 et seq.).

Siegel et al. disclose an inkjet process and a sublimation transfer printing on a textile with a composition comprising 0.1 to 30% by weight of an anthraquinone or quinophthalone which are free from ionic groups dye (component A), 0.1 to 20% by weight of a dispersant (component B), 0.1 to 30% by weight of a mono- or polyhydric alcohol and optionally water (see

Art Unit: 1751

abstract and col 5, lines 17 et seq.). Hermann et al. disclose the product of naphthalenesulfonic acid and formaldehyde condensation as component B (col 4, lines 29 et seq.).

However, Herrmann et al. or Siegel et al. do not explicitly disclose a composition that includes component B with an average molecular weight of at least 11 000g/mol and the components in the amounts as those recited by the Applicant.

In an analogous art, Mischke et al. show that dispersants from a condensation product of naphthalenesulfonic acid and formaldehyde with a molecular weight of 350 to 35,000 are well known (col 3, line 21 et seq.). It would have been obvious to a skilled artisan to optimize the molecular weight of the condensation product of Herrmann et al. or Siegel et al. to arrive at the desired viscosity prevention absent of unexpected results.

Regarding the percentage amounts of the components, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

Art Unit: 1751

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuo et al. (JP 05-255626 - machine translation provided) in view of Mischke et al. (US 5,508,389).

Kazuo et al. disclose a inkjet printing process with a composition that includes a disperse dye such as anthraquinone or azo-based (component A), a naphthalenesulfonic acid and formaldehyde condensation product (component B), a glycol (component C) and water (see abstract and page 2, parag. 11-15).

However, Kazuo et al. do not explicitly disclose a composition that includes component B with an average molecular weight of at least 11 000g/mol and the components in the amounts as those recited by the Applicant.

In an analogous art, Mischke et al. show that dispersants from a condensation product of naphthalenesulfonic acid and formaldehyde with a molecular weight of 350 to 35,000 are well known (col 3, line 21 et seq.). It would have been obvious to a skilled artisan to optimize the molecular weight of the condensation product of Herrmann et al. or Siegel et al. to arrive at the desired viscosity prevention absent of unexpected results.

Regarding the percentage amounts of the components, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d

Art Unit: 1751

454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuo et al. in view of Mischke et al. as applied to the claim above and further in view of Herrmann et al. or Siegel et al.

Kazuo et al. and Mischke et al. disclose the composition of claim 1 but do not explicitly disclose the sublimation printing feature.

In an analogous art, Herrmann et al. or Siegel et al. teach the dye composition is used for inkjet printing and sublimation printing on a textile. Therefore, it would have been obvious to a skilled artisan to use the dye composition of Kazuo et al. and Mischke et al. for sublimation printing on a textile. One would have been motivated to enhance the variety of the printed pattern and substrate.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri V. Nguyen whose telephone number is (571) 272-6965. The examiner can normally be reached on M-F 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nvt
Nvt, PhD
December 20, 2006

Lorna M. Douyon
LORNA M. DOUYON
PRIMARY EXAMINER